

installation and operation manual for Hunter Ceiling Fans



Your new Hunter[®] ceiling fan is an addition to your home or office that will provide comfort and performance for many years. This installation and operation manual gives you complete instructions for installing and operating your fan.

We are proud of our work. We appreciate the opportunity to supply you with the best ceiling fan available anywhere in the world. Before installing your fan, record the following information for your records and warranty assistance. Please refer to the carton and the Hunter nameplate label (located on the top of the fan motor housing) for the proper information.

Model Name:
Catalog/Model No.:
Serial No.:
Date Purchased: / /
Where Purchased:

Please also attach your receipt or a copy of your receipt for reference.

cautions and warnings

- Read entire booklet carefully before beginning installation. Save these instructions.
- Use only Hunter replacement parts.
- To reduce the risk of personal injury, attach the fan directly to the support structure of the building according to these instructions, and use only the hardware supplied.
- To avoid possible electrical shock, before installing your fan, disconnect the power by turning off the circuit breakers to the outlet box and associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- All wiring must be in accordance with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, you should use a qualified electrician.
- To reduce the risk of personal injury, do not bend the blade attachment system when installing, balancing, or cleaning the fan. Never insert foreign objects between rotating fan blades.
- To reduce the risk of fire, electrical shock, or motor damage, do not use a solid-state speed control with this fan. Use only Hunter speed controls.

getting ready

To install a ceiling fan, be sure you can do the following:

- Locate the ceiling joist or other suitable support in ceiling.
- Drill holes for and install wood screws.
- Identify and connect electrical wires.
- Lift 40 pounds.

If you need help installing the fan, your Hunter fan dealer can direct you to a licensed installer or electrician.

gathering the tools

You will need the following tools for installing the fan:

- Electric drill with 9/64" bit
- Standard screwdriver
- Phillips-head screwdriver
- Wrench or pliers

checking your fan parts

Carefully unpack your fan to avoid damage to the fan parts. Check for any shipping damage to the motor or fan blades. If one of the fan blades was damaged in shipment, return all the blades for replacement.

NOTE: If you are installing more than one fan, keep the fan blades in sets, as they were shipped.

If any parts are missing or damaged, contact your Hunter dealer or call Hunter Parts Department at 888-830-1326.

understanding Installer's Choice®

This patented 3-position mounting system provides you maximum installation flexibility and ease. You can install your Hunter fan in one of three ways. The steps in this manual include specific instructions for the fan mounting method of your choice. For a ceiling 8 feet or higher, standard mounting is recommended.

Flush Mounting (Figure 1) fits close to the ceiling, for low ceilings less than 8 feet high.



Figure 1 - Flush mounting

Standard Mounting (Figure 2) hangs from the ceiling by a downrod (included), for ceilings 8 feet or higher. For ceilings higher than 8 feet, you can purchase Hunter extension downrods. All Hunter fans use sturdy 3/4" diameter pipe to assure stability and wobble-free performance.



Figure 2 - Standard mounting

Angle Mounting (Figure 3) hangs from a vaulted or angled ceiling.



Figure 3 - Angle mounting

preparing the fan site

These guidelines are designed to help you select the best location for your fan and to prepare the site prior to installing the fan. Proper ceiling fan location and attachment to the building structure are essential for safety, reliable operation, maximum efficiency, and energy savings.

choosing the fan site

Within the room where you want to install the fan, choose a fan site where:

- No object can come in contact with the rotating fan blades during normal operation.
- The fan blades are at least 7 feet above the floor and the ceiling is at least 8 feet high.
- The fan blades have no obstructions to air flow, such as walls or posts, within 30 inches of the fan blade tips.
- The fan is directly below a joist or support brace that will hold the outlet box and the full weight of the fan.

See Figure 4 for the minimum mounting distances.



Figure 4 - Minimum mounting distances

using an existing fan site

If you are preparing a new fan site, go to the **preparing a new fan** site section.

If you plan to use an existing fan site, complete the following checklist for the support brace, ceiling hole, outlet box, and wiring. If you cannot check off every item, see the **preparing a new fan site** section for instructions on properly preparing the site for your new fan.

fan support system

- Fan must attach directly to building structure.
- Fan support system must hold full weight of fan and light kit.

ceiling hole

• Outlet box clearance hole directly below the joist or support brace.

outlet box

- UL-approved octagonal 4" x 1-1/2" outlet box (or as specified by the support brace manufacturer).
- Outlet box secured to joist or support brace by wood screws and washers through inner holes of outlet box.
- Outer holes of outlet box aligned with joist or support brace.
- Bottom of outlet box recessed a minimum of 1/16" into ceiling.

wiring

- Electrical cable secured to outlet box by approved connector.
- Six inches of lead wires extend from outlet box.

See Figure 5 for an adequate existing fan site.



Figure 5 - Adequate existing fan site

If your existing fan site is suitable, go to the **installing the ceiling plate** section and begin installing your new Hunter fan.

preparing a new fan site

To prepare the fan site follow four steps:

- Cutting the Ceiling Hole
- Installing the Support Brace (if necessary)
- Installing the Outlet Box
- Preparing the Wiring

cutting the ceiling hole

- 1. Locate the site for the hole directly below the joist or support brace that will hold the outlet box and fan.
- 2. Cut a 4" diameter hole through the drywall or plaster of the ceiling as shown in Figure 6. You will use the hole to install the support brace and outlet box.



Figure 6 - Cutting the ceiling hole

installing the support brace

If there is a ceiling joist directly above the hole which will allow the outlet box to be recessed a minimum of 1/16" in the ceiling, go to **installing the outlet box** section.

If there is not an adequate ceiling joist available, do the following:

- 1. Attach a 2" x 4" support brace between two joists. The support brace must allow the bottom of the outlet box to be recessed a minimum of 1/16" into the ceiling. See Figure 7.
- 2. Check the support brace to ensure it will support the full weight of the fan and light kit.

installing the outlet box

- 1. Obtain a UL-approved octagonal 4" x 1-1/2" outlet box, plus two #8 x 1-1/2" wood screws and washers, available from any hardware store or electrical supply house.
- 2. Orient the outlet box so that both the inner and outer holes in the box align with the joist or support brace.
- 3. Drill pilot holes no larger than the minor diameter of the wood screws (5/64") through the inner holes of the outlet box.
- 4. Attach the outlet box directly to the support brace or joist with two #8 x 1-1/2" wood screws and washers. The bottom of the outlet box must be recessed a minimum of 1/16" into the ceiling as shown in Figure 7.



Figure 7 - Installing the outlet box

preparing the wiring

ACAUTION: All wiring must be in accordance with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, you should use a qualified electrician.

- Make sure the circuit breakers to the fan supply line leads and associated wall switch location are turned off. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- 2. Thread the fan supply line through the outlet box so that the fan supply line extends at least 6" beyond the box as shown in Figure 8.
- 3. Attach the fan supply line to the outlet box with an approved connector, available at any hardware store or electrical supply house. Refer to Figure 8.
- 4. Make certain the wiring meets all national and local standards and ANSI/NFPA 70.



Figure 8 - Preparing the wiring

You have now successfully prepared your ceiling fan site. For instructions on how to install your ceiling fan, continue with the **installing the ceiling plate** section.

installing the ceiling plate

- 1. Drill two pilot holes into the wood support structure through the outermost holes on the outlet box. The pilot holes should be 9/64" in diameter.
- 2. Thread the lead wires from the outlet box through the hole in the middle of the ceiling plate.
- 3. Your fan comes with four neoprene noise isolators. Position the isolators between the ceiling plate and ceiling by inserting the raised areas on each isolator into the holes in the ceiling plate. Refer to Figure 9.



Figure 9 - Inserting the isolators into the ceiling plate

 Align the slotted holes (refer to Figure 10) in the ceiling plate with the pilot holes in the wood support structure. Note: The isolation pads should be flush against the ceiling. For Angled Ceilings: Be sure to orient the ceiling plate so that the arrows on the ceiling plate are pointing towards the ceiling peak. Refer to Figure 10.



on Angled Ceiling

Figure 10 - Locating the slotted holes to use

- 5. Place a flat washer on each of the two 3" screws and pass the screws through the slotted holes in the ceiling plate as shown in Figure 11.
- 6. Tighten the screws into the 9/64" pilot holes; do not use lubricants on the screws. Do not overtighten.



Figure 11 - Installing the ceiling plate

assembling the fan

assembling the fan for a standard or angled ceiling

- 1. Insert the downrod through the canopy and canopy trim ring as shown in Figure 12. Feed wires from the fan through the downrod.
- 2. Screw the downrod into the fan assembly until tight. IMPOR-TANT! Tighten allen head set screw as shown in Figure 12 with the included allen wrench.

ACAUTION: The downrod has a special coating on the threads. Do not remove this coating; the coating prevents the downrod from unscrewing. Once assembled, do not remove the downrod.

3. Continue to the **hanging the fan** section.



Figure 12 - Assembling the downrod

assembling the fan for a low ceiling

1. Remove the screw on the hanger ball to disassemble it from the downrod as shown in Figure 13.



Figure 13 - Removing the screw from the hanger ball

- 2. Remove the hook from the assembly.
- 3. Completely remove the allen head pipe set screw (identified in Figure 12) from the fan adapter.
- 4. Put the included set screw through the two black neoprene washers and the hook as shown in Figure 14. Hook must be installed in same orientation as shown in Figure 14.



Figure 14 - Assembling the set screw for low profile assembly

 Assemble the set screw to the adapter as shown in Figure 14. NOTE: The rubber washers should be tight enough to keep the hook standing straight up, but the set screw should not be completely tighten as to keep the hook from being able to swing.

- 6. Place the canopy trim ring then the canopy over the adapter as shown in Figure 15.
- 7. Place the low profile washer (lip up) into the canopy as shown in Figure 15 fitting the notch in the low profile washer over the adapter set screw and hook.



Figure 15 - Assembling canopy for low profile mounting

- 8. Rotate the canopy until the arrow on the low profile washer aligns with the tab hole on the canopy as shown in Figure 15.
- 9. Align the holes in the low profile washer with the holes in the adapter and assemble securely with the three #8-32 x 3/4" screws.

hanging the fan

6

1. Raise the fan and place the hook through the loop on the ceiling plate as shown in Figure 16. Use the note and arrow engraved in the ceiling plate to assist in determining the direction to assemble.

AWARNING: Fan may fall if not assembled as directed in these installation instructions.



Figure 16 - Hanging the fan

wiring the fan

- 1. Disconnect the power by turning off the circuit breakers to the outlet box and associated wall switch location.
- 2. Connect the wires as shown in Figure 17. To connect the wires, twist the bare metal leads together. Place a wire nut over the intertwined length of wire and twist clockwise until tight as.

ACAUTION: Be sure no bare wire or wire strands are visible after making connections.

All wiring must be in accordance with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, you should use a qualified electrician.



Figure 17 - Wiring the fan

installing the canopy

 Rotate the fan 180° clockwise from the initial position when hanging the fan. The arrows on the hanger ball and on the ceiling plate should be pointing in the same direction and should be pointing towards the tab hole on the canopy. Refer to Figure 18.



Figure 18 - Rotating the fan

For Flush Mounting: The arrows on the low profile washer and on the ceiling plate should be pointing in the same direction and should be pointing towards the tab hole on the canopy.

- 2. Hook the tab hole over the tab on the ceiling plate as shown in Figure 19.
- 3. Raise the canopy, be sure the holes in the canopy and the ceiling plate are aligned, and loosely assemble the canopy screws one at a time. When all three screws are assembled, securely tighten all three canopy screws. Refer to Figure 19.



Figure 19 - Installing the canopy

installing the canopy trim ring

1. To easily install the canopy trim ring, locate the two tabs on the canopy trim ring. See Figure 20.



Figure 20 - Canopy trim ring

- 2. Take both hands and push the canopy trim ring up to the top of the canopy. See Figure 20.
- 3. The canopy trim ring will snap and lock into place on the canopy.

removing the canopy trim ring

- 1. Locate the tab indicators, small bumps on top of tabs. Refer to Figure 21.
- 2. To remove the canopy trim ring, press firmly on opposite sides of the ring towards the canopy as shown in Figure 21. The tabs will flex out releasing the trim ring from the canopy.



Figure 21 - Removing the canopy trim ring

assembling the blades

Hunter fans use several styles of fan blade irons (brackets that hold the blade to the fan).

1. Your fan may include blade grommets. If your fan has grommets, insert them by hand into the holes on the blades as shown in Figure 22.



Figure 22 - Inserting the grommets into the fan blades

2. Attach each blade to blade iron using three blade assembly screws as shown in Figure 23. Some fans feature a decorative medallion as well as a blade iron. Insert the assembly screws into the blade iron, through the blade and into the medallion, with the blade sandwiched between the blade iron and medallion as shown in Figure 24.



Figure 23 - Attaching the blade to the blade iron



Figure 24 - Attaching the blade to the blade iron and medallion

If you used grommets, the blades may appear slightly loose after screws are tightened. This is normal.

- 3. Remove the blade mounting screws and rubber shipping bumpers from the motor.
- 4. For each blade, insert one blade mounting screw through the blade iron as shown in Figure 25, and attach lightly to the fan. Insert the second blade mounting screw, then securely tighten both mounting screws.



Figure 25 - Attaching the blade iron to the fan

setting up the remote

Transmitter Model: 85095-01 Transmitter Battery: 12 V, Type 23A, MN-21 or equivalent Receiver Model: 85112-04 Ratings: 120 VAC, 60 Hz,1.0 Amp Fan Receiver Weight: 8 oz. 240 Watts incandescent light

A Caution: Risk of Electrical Shock!

All wiring must be performed in accordance with national and local electrical codes. If you are unfamiliar with the wiring codes, you should use a qualified electrician.

To avoid overheating and possible damage to other equipment, do not install to control a receptacle, fluorescent light fixture, motor operated appliance, or transformersupplied appliance. Use only to control one paddle-blade ceiling fan and incandescent light fixture.

This device complies with part 15 of the FCC rules. Changes or modifications not expressly approved by Hunter Fan

Company could void your authority to operate this equipment!

Operation Is Subject To The Following Two Conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation. Note: Any changes or modifications to the transmitter or receiver not expressly approved by Hunter Fan Company may void one's authority to operate this remote control.

Your fan is equipped to be operated by remote control. A receiver device is mounted inside the fan switch housing. A hand-held transmitter is packed in the fan box. The transmitter requires a 12-volt battery (included). The operating range is 15-30 feet.

setting the code

When two or more fans are located near each other, you may desire to have each of them set to a different code, so that the operation of one fan will not affect another. This is accomplished by changing the position of any one or more of a group of 3 jumpers grouped together in the transmitter. The receiver located in the switch housing has the same set of 3 jumpers which must also be changed to match the transmitter settings.

These jumpers are very small and can best be operated by using a small pair of pliers or tweezers.

In the transmitter, the jumpers are readily accessible from the battery compartment. The switches in the receiver are located at the bottom of the receiver device in the switch housing. See Figures 26 and 27.

To set the jumpers in the receiver, remove the receiver from the switch housing and set the jumpers in the same positions as the jumpers in the transmitter. See Figure 27.

Replace the receiver, making sure the mounting holes at the top of the switch housing line up with the matching slots in the top of the receiver.



Figure 26 - Transmitter jumper switches



Figure 27 - Receiver jumper switches

installing the switch housing

attaching the upper switch housing

- 1. Partially install two #6-32 x 3/8" housing assembly screws into the switch housing mounting plate as shown in Figure 28.
- 2. Feed the upper plug connector through the center opening of the upper switch housing. See Figure 28.



Figure 28 - Attaching the upper switch housing to the mounting plate

- 3. Align the keyhole slots in the upper switch housing with the housing assembly screws installed previously.
- 4. Turn the upper switch housing counterclockwise until the housing assembly screws are firmly situated in the narrow end of the keyhole slots as shown in Figure 29. Install the one remaining #6-32 x 3/8" housing assembly screw into the third hole in the upper switch housing. Tighten all three screws firmly.



Figure 29 - Mounting the upper switch housing

ACAUTION: Make sure the upper switch housing is securely attached to the switch housing mounting plate. Failure to properly attach and tighten all three housing assembly screws could result in the switch housing and light fixture falling.

attaching the lower switch housing

1. First insert the plug from the upper housing into the plug receptacle in the receiver module.

NOTE: The plug is polarized and will only go together one way. Make sure you have correctly aligned plug and receptacle.



Figure 30 - Connecting the plug connectors

2. Place the lower switch housing assembly over the upper switch housing. Align the side screw holes in the upper and lower switch housings. Attach the lower switch housing to the upper switch housing with three #6-32 x 3/8" housing assembly screws. See Figure 30.

NOTE: If the two pieces are difficult to assemble, check the alignment of the (3) slots in the top of the receiver module and the mounting holes in the lower switch housing. They should align together.

installing accessory light fixtures

To install the light fixture, follow the instructions included with the light fixture for wiring, mounting, and assembly.

- 1. Turn on electrical power to the fan.
- 2. Ceiling fans work best by blowing air downward (counterclockwise blade rotation) in warm weather to cool the room with a direct breeze. In winter, having the fan draw air upward (clockwise blade rotation) will distribute the warmer air trapped at the ceiling around the room without causing a draft. Refer to Figure 31.



Figure 31 - Air flow patterns

operating the remote control

The hand-held transmitter has individual buttons for control of the light, for controlling the fan speeds, for turning the fan off, and for reversing. See Figure 32.

The fan may be started by pressing the HIGH, MEDIUM, or LOW speed buttons. For best operation, allow the fan to start on HIGH, then select the desired speed. Press the fan OFF button to turn the ceiling fan off. Press the REVERSE button to change the fan's direction while the fan is running.

NOTE: Replace 12-volt battery with type 23 A, MN-21 or equivalent.



Figure 32 - Remote operation

mounting the remote holder

A holder is supplied with the transmitter which can be mounted to a existing toggle switch wall plate. The holder will help prevent misplacement of your transmitter by providing a permanent receptacle. See Figure 33.

If desired, the holder can be mounted to a convenient location on a wall.



Figure 33 - Remote holder assembly

cleaning your ceiling fan

caring for finishes

For cleaning, a soft brush or lint-free cloth should be used to prevent scratching the finish. A vacuum cleaner brush nozzle can remove heavier dust. Surface smudges or an accumulation of dirt and dust can easily be removed by using a mild detergent and a slightly dampened cloth. An artistic agent may be used, but never use abrasive cleaning agents as they will damage the finish.

caring for blades

Wood finish blades should be cleaned with a furniture polishing cloth. Occasionally, a light coat of furniture polish may be applied for added protection and beauty. Painted and high-gloss blades may be cleaned in the same manner as the fan finish.

troubleshooting

Problem: Nothing happens; fan does not move.

- 1. Turn power on, replace fuse, or reset breaker.
- 2. Loosen canopy, check all connections according to the **wiring the fan** section.
- 3. Check the plug connection in the switch housing.
- 4. Push motor reversing switch firmly up or down to ensure that the switch is engaged.
- 5. Remove the shipping bumpers.
- Problem: Noisy operation.
 - 1. Tighten the blade bracket screws until snug.
 - 2. Tighten the blade screws until snug.
 - 3. Check to see if the blade is cracked. If so, replace all the blades.
 - 4. Be sure that the glass is secure.
 - 5. Check and tighten the screws in the switch housing mounting plate and in the upper and lower switch housing.

Problem: Excessive wobbling.

- 1. If your fan wobbles when operating, use the enclosed balancing kit and instructions to balance the fan.
- 2. Tighten all blade and/or blade iron screws.
- 3. Turn power off, support fan very carefully, and check that the hanger ball is properly seated.

Problem: No functions operate.

- 1. Replace fuse. Turn ON circuit breaker. Turn ON wall switch.
- 2. Set transmitter and receiver to same jumper switch setting.
- 3. Replace with new, alkaline battery.

Problem: Operates only at close range.

1. Replace with new, alkaline battery.

Problem: Inconsistent operation.

- 1. Turn OFF wall switch for 5 seconds, then turn back ON.
- 2. Change jumper switch settings to a different code in both transmitter and receiver.

Problem: Fan will not reverse.

1. Select a fan speed button to start fan, then press the reverse button.

If you need parts or service assistance, please call 888-830-1326 or visit us at our WEB site at http://www.hunterfan.com.

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